AMD Ryzen™ 9 7845HX

GENERAL SPECIFICATIONS
CONNECTIVITY
GRAPHICS CAPABILITIES
PRODUCT IDS
SECURITY, VIRTUALIZATION, AND MANAGEABILITY

General Specifications

Platform:	Laptop
Product Family:	AMD Ryzen™ Processors
Product Line:	AMD Ryzen™ 9 Processors with Radeon™ Graphics
AMD PRO Technologies:	No
Consumer Use:	Yes
Regional Availability:	Global, China, NA, EMEA, APJ, LATAM
Former Codename:	"Dragon Range"
Architecture:	"Zen 4"
# of CPU Cores:	12
Multithreading (SMT):	Yes
# of Threads:	24
Max. Boost Clock:	Up to 5.2GHz
Base Clock:	3.0GHz
L1 Cache:	764KB
L2 Cache:	12MB
L3 Cache:	64MB
Default TDP:	55W
AMD Configurable TDP (cTDP):	45-75W
Processor Technology for CPU Cores:	TSMC 5nm FinFET
Processor Technology for I/O Die:	TSMC 6nm FinFET
CPU Compute Die (CCD) Size:	71mm^2
I/O Die (IOD) Size:	122mm^2
Package Die Count:	3
Unlocked for Overclocking:	Yes
AMD EXPO™ Memory Overclocking Technology:	Yes
Precision Boost Overdrive:	Yes
CPU Socket:	FL1
CPU Boost Technology:	Precision Boost 2
Instruction Set:	x86-64
Supported Extensions:	AES, AMD-V, AVX, AVX2, AVX512, FMA3, MMX(+), SHA, SSE, SSE2, SSE3, SSE4.1, SSE4.2, SSE4A, SSSE3, x86-64
Max. Operating Temperature (Tjmax):	100°C
***OS Support:**	Windows 11 - 64-Bit Edition Windows 10 - 64-Bit Edition RHEL x86 64-Bit Ubuntu x86 64-Bit *Operating System (OS) support will vary by manufacturer.

Connectivity

USB Type-C® Support:	Yes
Native USB 3.2 Gen 2 (10Gbps) Ports:	4
Native USB 2.0 (480Mbps) Ports:	1
PCI Express® Version:	PCIe® 5.0
Native PCIe® Lanes (Total/Usable):	28/28
NVMe Support:	Boot, RAID0, RAID1, RAID10
System Memory Type:	DDR5
Memory Channels:	2
Max. Memory:	64GB
System Memory Subtype:	SO-DIMM
Max Memory Speed:	**2x1R** DDR5-5200 **2x2R** DDR5-5200
ECC Support:	No

Graphics Capabilities

Integrated Graphics:	Yes
Graphics Model:	AMD Radeon™ 610M
Graphics Core Count:	2
Graphics Frequency:	2200 MHz
GPU Base:	400 MHz
DirectX® Version:	12
DisplayPort™ Version:	2.1
HDMI® Version:	2.1
HDCP Version Supported:	2.3
USB Type-C® DisplayPort™ Alternate Mode:	Yes
Multi-Monitor Support:	Yes
Max Displays:	4
AMD FreeSync™:	Yes
Wireless Display:	Miracast
AMD SmartShift MAX:	Yes
AMD SmartAccess Memory:	Yes

Product IDs

Product ID Tray:	100-000000871

Security, Virtualization, and Manageability

AMD Enhanced Virus Protection (NX bit):	Yes

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